

## **Remarks**

Claims 1-15 are pending in the application, claims 10-15 are withdrawn from consideration, and claims 1-9 are rejected. By this paper, claims 10-15 are canceled. Based on the following, Applicants request reconsideration of claims 1-9.

### **Claim Rejections—35 U.S.C. § 103**

The Examiner rejected claims 1-9 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,401,146 (Moriya et al.) in view of UK Patent Application GB2346266 (Hurley).

As stated in the MPEP, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art." MPEP § 2143.01, 8<sup>th</sup> ed., Rev. 2. An examination of Moriya et al. and Hurley indicates that there is no teaching, suggestion or motivation to combine these references. For example, Moriya et al. describes a pump casing for a fluid pump. Conversely, Hurley describes an airgap motor which is completely unrelated to a fluid pump. In addition to being used for completely different applications, the airgap motor described in Hurley has completely different design considerations from the fluid pump in Moriya et al.

Airgap motors, such as the airgap motor described in Hurley, have a stator and rotor which are disposed adjacent to each other, parallel to an axis of rotation. This configuration requires design, manufacturing and use considerations that are different from an axial fluid pump. For example, in an airgap motor, consideration must be given to the axial loads resulting from the attraction between the stator and rotor. No such considerations are necessary in an axial fluid pump. Moreover, the fluid pump described in Moriya et al. has a stator circumferentially disposed around a rotor, both of which are disposed inside a pump

casing. The MPEP explicitly states that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." MPEP § 2143.01, 8<sup>th</sup> ed., Rev. 2. There is no suggestion to combine the cited references either in the references themselves, or in the knowledge available to one of ordinary skill in the art; these two devices not only have different uses, but completely different design considerations.

Despite the lack of teaching, suggestion, or motivation to combine Hurley with Moriya et al., even if these references are combined, they do not teach or suggest all of the claim limitations found in the rejected claims. The MPEP states that in order to establish *prima facie* obviousness, all of the claim limitations of an invention must be taught or suggested by the prior art. MPEP § 2143.03, 8<sup>th</sup> ed., Rev. 2. Claim 1, for example, recites a fluid pump for pumping liquid having an encapsulated stator assembly that is enclosed and sealed by a polymeric capsule member and "the polymeric capsule member defines a rotor cavity...." No such limitations are taught or suggested by the cited references.

The airgap motor of Hurley has no need for a rotor cavity, since in an axial airgap motor, such as described in Hurley, the rotor is adjacent to the stator. Indeed, rather than a rotor cavity, the encapsulated structure described in Hurley has a shaft 4 molded into it (Hurley, page 1). Likewise, Moriya et al. does not teach any encapsulated stator assembly, and further, has no use for a molded rotor cavity, since Moriya et al. specifically employs the use of a metal pump casing and "[a] cylindrical can [ ] fitted in the stator 27 which is fixedly positioned in the motor frame outer barrel 24." (Col. 6, ll. 26-28.) The present invention, as recited in claim 1, requires no such metal can, and thus provides advantages over pumps such as described in Moriya et al. The combination of Moriya et al. and Hurley, therefore, does not teach or suggest all of the claim limitations of claim 1 of the present application.

Applicants reiterate that there is no teaching, suggestion, or motivation to combine Hurley with Moriya et al., but even if such combination is made, it still does not

teach or suggest all of the claim limitations of claim 1. Therefore, with regard to claim 1, the MPEP requirements for *prima facie* obviousness are not met.

Claim 1 is the base claim for claims 2-9. Each of these dependent claims contains all of the limitations of claim 1, as well as additional limitations which further distinguish it from the cited references. Therefore, with regard to these dependent claims, the MPEP requirements for *prima facie* obviousness are not met.

The Examiner rejected claims 1-5 and 7-9 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 2,520,880 (Harlamoff) in view of Hurley. Just as there is no teaching, suggestion or motivation to combine the axial fluid pump of Moriya et al. with the airgap motor of Hurley, so to is there no teaching, suggestion or motivation to combine the centrifugal pump of Harlamoff with the airgap motor of Hurley. Even if, however, these references are combined, they still do not teach, or even suggest, all of the claim limitations of any of the rejected claims. For example, the combination of Harlamoff and Hurley does not teach or suggest a fluid pump that includes an encapsulated stator assembly that is enclosed and sealed by a polymeric capsule member which defines a rotor cavity; yet this is specifically recited in claim 1 of the present application. Claim 1 is the base claim for claims 2-5 and 7-9. Each of these dependent claims contains all of the limitations of claim 1, as well as additional limitations which further distinguish it from the cited references. Therefore, there is no teaching, suggestion, or motivation to combine Harlamoff and Hurley, but even if such combination is made, it still does not teach or suggest all of the claim limitations of any of claims 1-5 or 7-9. Thus, with regard to these claims, the MPEP requirements for *prima facie* obviousness are not met.

By this paper, claims 10-15 are canceled. Based on the discussion above, and the cancellation of claims 10-15, Applicants submit that this application is now in a condition for allowance.

Respectfully submitted,

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